

ABSTRACT OF THE DISCLOSURE

Methods and systems are disclosed for decoding image data including I-picture, P-picture, and B-picture encoded data. A method includes receiving encoded image data and selectively performing a modified inverse discrete cosine transform (IDCT) process to generate output pixel array blocks at a lower resolution than the resolution of the received image data. The image data can be 8 x 8 pixel array blocks, which are used to produce lower resolution pixel array blocks such as, for example, 4 x 8 or 4 x 4 pixel array blocks. In certain instances, after the IDCT process is performed, the resulting pixel data is up-sampled before motion compensation is performed. Furthermore, in certain instances, the resulting pixel data is subjected to motion compensation and scaled to display size prior to display.